MEYERTECH
SECURITY with VISION

ZSI-450-IP

Installation Guide & User Manual

ZSI-450-IP

CCTV Remote Site Integration via IP
Issue 02

ZSI-450-IP

MEYERTECH LIMITED

Contents

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Introduction

Thank you for purchasing Meyertech's ZSI-450-IP.
Please read this user guide prior to using
this product. It will help you to achieve the maximum
benefit from the product.

What is a ZSI-450-IP?

A ZSI-450-IP is part of the ZoneVu family. It allows the
interconnection of remote sites via 3rd party TCP/IP
connections.

Combined with other members of the Meyertech site controller
family, an operator can seamlessly control cameras
located throughout the world.

KEY FEATURES

- TCP/IP Connection

- Intersite Communications

- Video Transmission

- Variable Speed Operation

- Support of Meyertech 3rd Party Interfaces

The features described in this manual refer to :

Version 1.3.0.0 of the ZSI-450-IP software

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Operation

Direct Control System
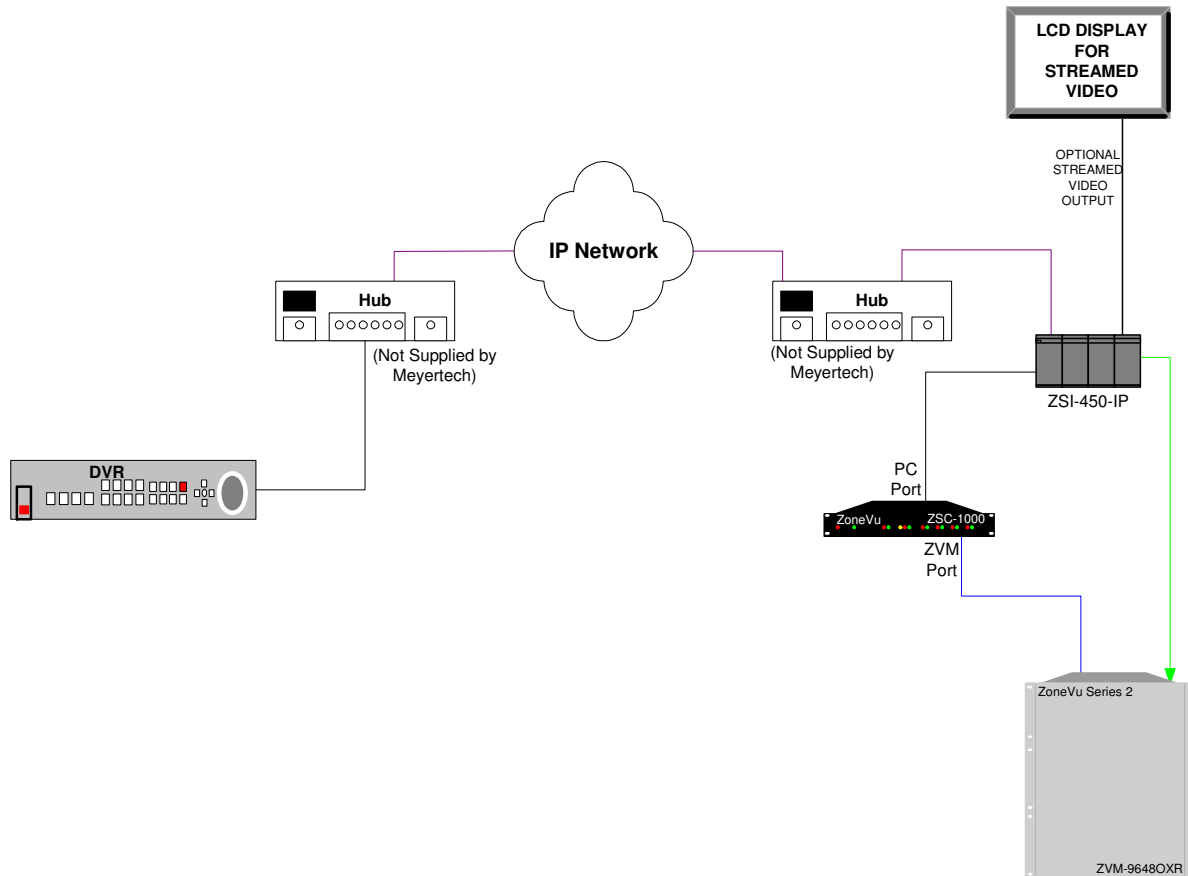
This method of operation shows a single ZSI-450-IP at the control room (the right of the diagram). The ZSI-450-IP receives commands from the ZSC-1000plus via the PC2 port. These commands may come from either Meyertech keyboards or the Fusion GUI.

The ZSI-450-IP interprets the commands and where necessary forwards the commands directly to the DVR. The video from the remote DVR is also streamed over IP to the ZSI-450-IP.

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Remote Control System

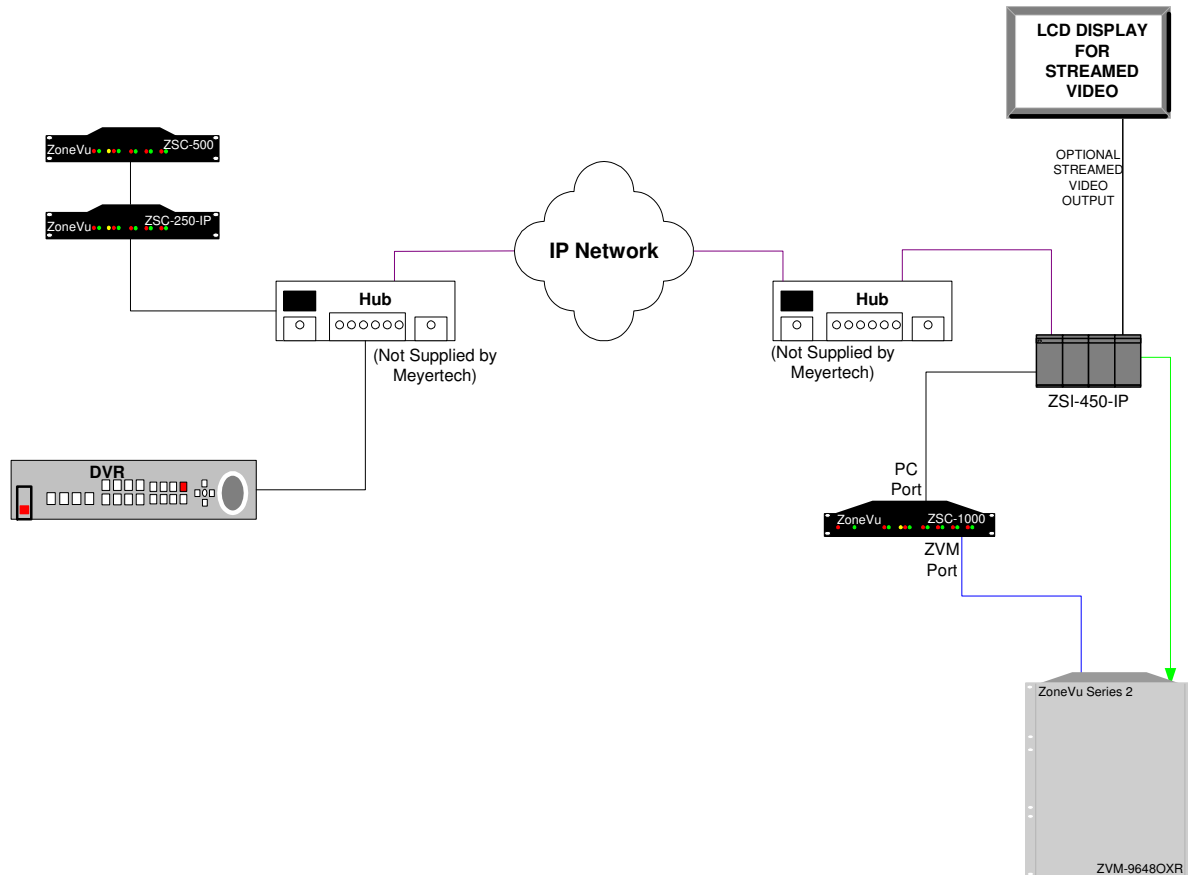This method of operation shows a single ZSI-450-IP at the control room (the right of the diagram). The ZSI-450-IP receives commands from the ZSC-1000plus via the PC2 port. These commands may come from either Meyertech keyboards or the Fusion GUI.

The ZSI-450-IP interprets the commands it receives and decides whether to communicate directly with the remote DVR or whether to forward the commands to ZSC-250-IP at the remote site. Any commands that are forwarded to the ZSC-250-IP are then passed on to the site controller at the remote site.

In this mode of operation the ZSI-450-IP has an active IP connection to the DVR (video and data stream) and also an active connection to the ZSC-250-IP.

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Multiple ZSI-450-IP System
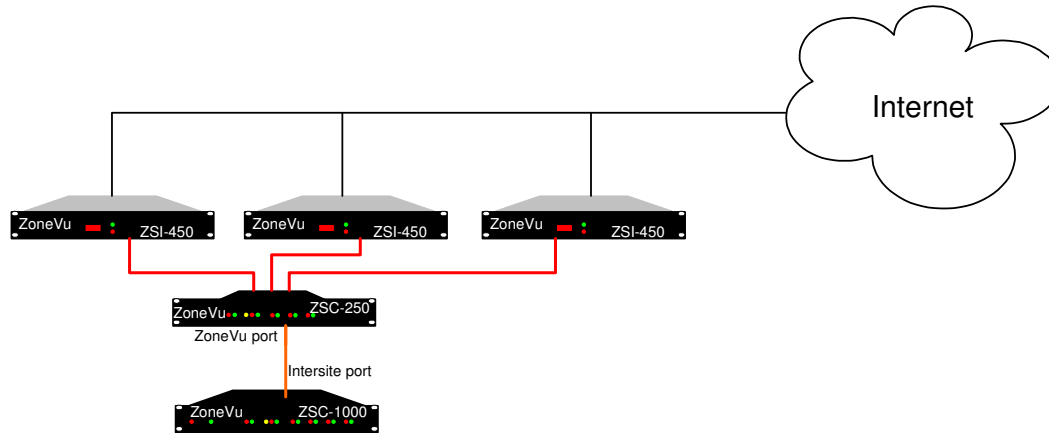
This method of operation can use a mixture of the previously described modes. It is possible that some of the remote DVR's also have remote control via a ZSC-250-IP, while it is also possible that they support direct control only. The image provided serves only as an example to show how multiple ZSI-450-IPs can co-exist in a CCTV system.

The ZSC-1000plus forwards the site commands to the ZSC-250 which in turn uses the next available ZSI-450-IP to make the connection to the remote site. Usage from then on is as described for the previous two modes of operation depending on the control mode selected for the DVR. Please refer to the ZSC-250 manual addendum regarding intersite operation for more details of how to set sites up using this method.

Single remote site
- ZSC-250 optional
- Supports telemetry

Multiple remote sites
- Must have a ZSC-250
- No telemetry support
- All sites must exist on the same network
- Cannot mix ISDN and IP sites

Multiple ZSI-450-IPs
- Must have a ZSC-250
- No telemetry support

Notes:

- Without a ZSC-250 the IP connection is permanently made and the PC2 port on the Site controller is used in it's place.

- When operating with multiple sites, permanent connection is not supported. Ie if the output is not being switched through to a monitor then the remote site is disconnected.

- Each remote site can have only one DVR.

- ZSI-450-IPs do not support local switching or playback. Ie they provide control of remote video.

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General Installation Features

Registry Settings

The registry holds all configuration data for the ZSI-450-IP. To access the registry editor press "Start" and then "Run". At the prompt type "regedit" and press enter. The application will then launch.
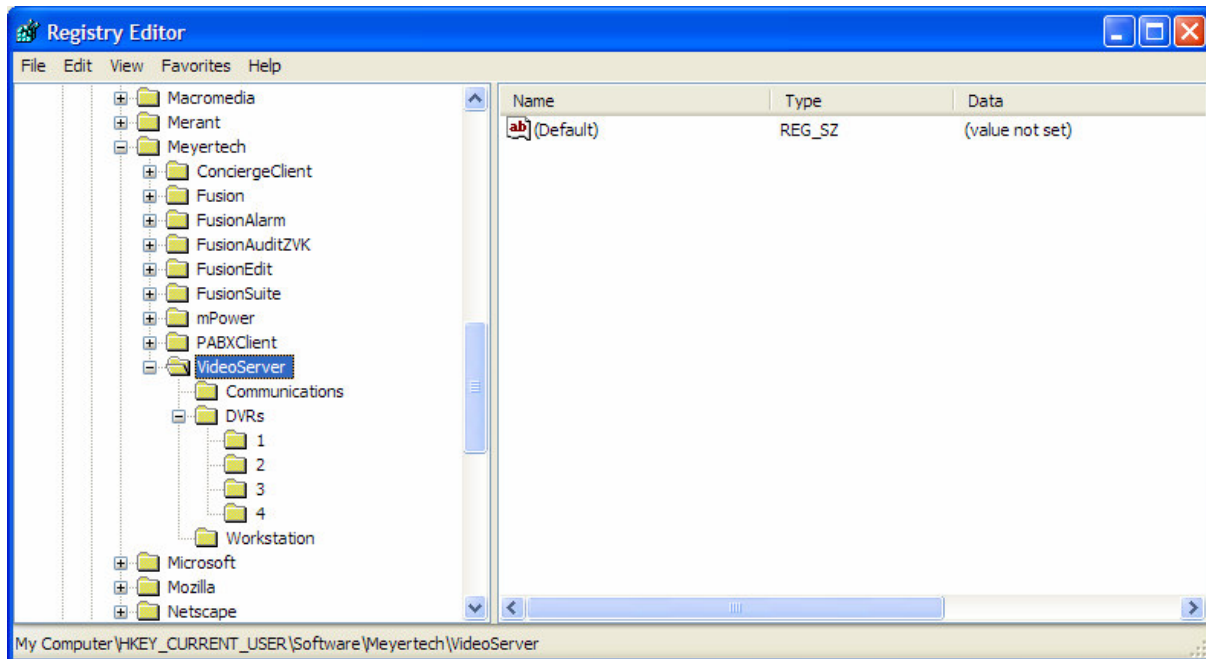
Once the registry editor has loaded, navigate to the following key:

> HKEY_CURRENT_USER\Software\Meyertech\VideoServer

This is the main registry key for the ZSI-450-IP settings, it has three sub keys. Each of these sub keys are described below.

Communications

Inside the Communications key there are two values both of which are DWORD values. These are "Baud" and "Port".

The Baud value allows the user to specify the baud rate at which the selected port should operate. Valid entries here are 9600, 19200 and 38400. ***When entering these values be sure that the base for the current data is set to decimal, this is set to hexadecimal by default and if a value was to be entered this way it would result as an obscure value and the ZSI-450-IP would default to 9600 in this case.***

The Port value allows the user to specify the number of the serial port to use.

DVRs

Inside the DVR's key there are a variable amount of sub keys. Each of these sub keys has a number for the name of the key. This number represents the remote site number that the values within that key represent. So effectively this is where each of the sites supported by the ZSI-450-IP are to be configured. In the above example these keys are listed as 1,2,3 and 4.

Within these keys are six values. These are **CONTROL_MODE, DVR_MODE, DVR_ADDRESS, DVR_PORT, ZONEVU_ADDRESS** and **ZONEVU_PORT**.

CONTROL_MODE
The control mode value allows the user to choose between two different control modes. If the control mode is set to 0, then the communications for the remote site will be via the active-x control that is running on the ZSI-450-IP. In most cases this would mean that no extra telemetry is sent to the remote site other than those listed in the supported IP interfaces document which is available from Meyertech. Alternatively, if the control mode is set to 1 then the control mode is set up as remote site control. This requires a ZSC-250-IP at the remote site and any extra telemetry will be forwarded via IP to the ZSC-250-IP unit. This method allows for complete control of the remote site.

DVR_MODE
The DVR mode value allows the user to specify the type of DVR that is to be used for this site. The values that are used are in appendix 1 at the end of this document.

DVR_ADDRESS
The DVR address value allows the user to specify the name or the IP address of the remote DVR to connect to.

DVR_PORT
The DVR port value is not used by all of the DVR's (only Vista Columbus and Neurodynamics) but it is used to specify the socket number to connect to on the remote DVR.

ZONEVU_ADDRESS
The ZoneVu address value and the ZoneVu port value are only used if the control mode is set to 1 (for remote site control). The address value specifies the name or the IP address of the remote ZSC-250-IP to connect to.

ZONEVU_PORT
The port value is used to specify the port to which the connection is made on the unit.

Network Settings

While installing the ZSI-450-IP it may be necessary to configure the network settings for the unit to make it compatible with the network and so that it can communicate with the other devices on the network that it needs to (DVR's and where applicable, other ZSI-450-IP's).

This work should be undertaken by the network administrator as, unless Meyertech provide the network solution directly, we are unable to know the exact configuration of either the network itself (support for DHCP or Static IP addresses) or the configuration of other units on the network (possible IP conflicts, different subnet masks etc).

If any further advice is required on this area. Please contact Meyertech, contact details are given at the end of this document.

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Remote Desktop

The ZSC-450-IP will be shipped with remote desktop enabled. This means engineers will be able to log onto the machine remotely. This makes updating the ZSC-450-IP very convenient.

Remote desktop can be launched from any remote Windows XP Pro computer by pressing "Start" and then "Run". At the prompt type "mstsc" and press enter (alternatively it can be found in "Start->All Programs->Accessories->Communications->remote desktop connection"). The remote desktop application will then launch.
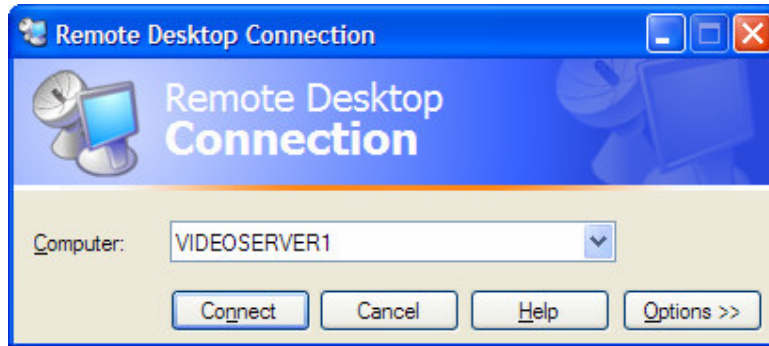
Enter the name or the IP address of the ZSI-450-IP to connect to. If the computer specified is valid and is on the same network then the windows login prompt for the remote PC will appear.

If the user name and password for the ZSI-450-IP is not known, please contact Meyertech.

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3rd Party Setup

Please refer to the manual **ZSI-EFDIPProtocols** which will contain details on any 3rd party specific setup or configuration that is required.

Specification

Feature	Parameter
Network	
	Ethernet 10/100M
	Ethernet 1G optional
Telemetry	
	RS232
	No handshaking
Alarms	
Functionality	Not supported
Pass through	When connected will forward ZoneVu alarm information
Video	
Format	S-video
Resolution	3rd party dependant
Frame rate	3rd party dependant
Supply	
In	240Vac
Power	161W
Operating System	
	Windows XP
Dimensions	482x165x44 (1U 19-inch sub-rack)
Weight	1.1 kg

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Meyertech Limited is a member of the CCTV User Group.

Support

Meyertech offer comprehensive levels of support during the product's warranty period. Our support team will be happy to help with any problem you may experience relating to the installation or operation of ZSI-450-IP:

1. Telephone support (+44(0)161 628 8406) which is available during normal office hours 9AM – 5PM Monday to Friday excluding Bank holidays. This support is free of charge.
2. Email support. Available 24 hours a day. Our normal response to emails is next working day. This support is free of charge. support@meyertech.co.uk
3. By Facsimile (+44(0)161 628 9811). Available 24 hours a day. Our normal response to facsimiles is next working day. This support is free of charge.
4. Site visits. Subject to availability, our engineers are available to attend site to assess and help with particular system problems firsthand. This service is chargeable. Please contact our Support department on +44(0)161 628 8406 for further details and availability.

Meyertech offer Extended Support Contracts on all their software products. Please contact our Sales department on 0161 628 8406 to discuss your requirements or visit our website www.meyertech.co.uk

Maintenance

Servicing

The ZSI-450-IP is a Microsoft Windows XP machine and therefore may require periodic maintenance.

The ZSI-450-IP hardware contains no serviceable parts and should be returned to our Service Centre in Oldham for repair or replacement under warranty. Any repairs, attempted repairs or replaced components not carried out by the Meyertech Service Centre will void all Meyertech warranties and liabilities.

If your ZSI-450-IP has to be returned to our Service Centre please follow the returns procedure below, otherwise delays may be incurred in returning or replacing the ZSI-450-IP.

Returns Procedure

Prior to returning your ZSI-450-IP.

1. Contact our Oldham office by phone on +44 (0) 161 628 8406 or by email support@meyertech.co.uk for a Goods Return Number, GRN.
2. The GRN will be logged by our staff along with the reported problem.
3. Pack the ZSI-450-IP into the original packing it was delivered in. Failure to do so means the unit may incur further damage in transit, which Meyertech cannot be responsible for.
4. Organise delivery of the ZSI-450-IP back to our Oldham office (address is shown below). Use a reputable carrier, as again Meyertech cannot accept liability for loss or damage of goods in-transit.
5. On receiving the ZSI-450-IP our staff will, after initial examination advise of the course of action we intend to take.
   a. Repair the ZSI-450-IP under warranty. The ZSI-450-IP will be repaired and returned to you free of charge.
   b. Replace the ZSI-450-IP under warranty. The ZSI-450-IP will be repaired and returned to you free of charge.
   c. Repair the ZSI-450-IP at a quoted cost. An official purchase order to cover the cost and return of the product will be required prior to commencement of repair.

d.   Advise you that the ZSI-450-IP is not repairable. You can then decide to have the product returned to you at the standard delivery charge or we can dispose of the product free of charge.

Meyertech Limited
Office Block One
Southlink Business Park
Oldham
OL4 1DE

Tel: 0161 628 8406
Fax: 0161 628 9811

Decommissioning

There are no additional requirements beyond safe working practice in the decommissioning of the Meyertech ZSI-450-IP.

However the ZSI-450-IP contains printed circuit boards populated with electronic components. The whole unit must be returned to **Meyertech Service Centre** for final disposal. Please follow the normal returns procedure.

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Appendix 1

List of values for the DVR mode registry entry.

DVR Mode Value	DVR
0	No DVR type specified
1	Neurodynamics
2	Panasonic HD-220
3	Vista Columbus
4	Vigilant Elite

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Warranty

Please refer to Meyertech Limited 'Terms & Conditions of Sale of Goods & Services' for interpretation.

1. If the Buyer establishes to the Seller's reasonable satisfaction that there is a defect in the materials or workmanship of the Goods manufactured, then the Seller shall at its option, at its sole discretion and within a reasonable time,
    a. arrange for the repair or making good such defect or failure in such Goods free of charge to the Buyer (including all costs of transportation of any Goods or materials to and from the Buyer for that purpose),
    b. replace such Goods with Goods which are in all respects in accordance with the Contract, or subject, in every case, to the remaining provisions of this Condition 1 provided that the liability of the Seller under this Condition 1 shall in no event exceed the purchase price of such Goods and performance of anyone of the above options shall constitute an entire discharge of the Seller's liability under this warranty.

2. Condition 1 shall not apply unless the Buyer:

    a. notifies the Seller in writing of the alleged defect within 12 (twelve) months from delivery or such other period or periods as may be agreed in writing between the Seller and the Buyer, and
    b. allows the Seller a reasonable opportunity to inspect the relevant Goods.

3. For the avoidance of doubt, the Seller shall be under no liability under the warranty in Condition 1 above:
    a. where such defects arise from any drawing, design or specification supplied by the Buyer; or
    b. where such defects arise from fair wear and tear, wilful damage, or negligence of a party other than the Seller (or its employees or authorised personnel), abnormal working conditions, failure to follow the Seller's instructions (whether oral or in writing), misuse or alteration or repair of the Goods without the Seller's approval; or
    c. where such defects arise in parts, materials or equipment which have not been manufactured or designed by the Seller but have been purchased at the Buyer's request by the Seller from the Buyer's designer and manufacturer or from some other third party (the **"Third Party Supplier").**
    d. if the total price of the Goods has not been paid by the due date for payment
    e. in respect of any type of defect, damage or wear specifically excluded by the Seller by notice in writing: or
    f. if the Buyer makes any further use of the Goods after giving notice in accordance with Clause 1

4. Any repaired or replaced Goods shall be redelivered to the Buyer free of charge to the original point of delivery but otherwise in accordance with and subject to these Conditions.

5. Alternatively to Condition 1 the Seller shall be entitled at its absolute discretion on return of the defective Goods to the Seller (at the Seller's request) to refund the price of the defective Goods in the event that such price shall already have been paid by the Buyer to the Seller, or, if such price has not been paid, to relieve the Buyer of all obligation to pay the sum by the issue of a credit note in favour of the Buyer in the amount of such price.

6. In respect of all Goods supplied to the Seller by a Third Party Supplier the Seller will on request pass on to the Buyer (in so far as reasonably possible) the benefit of any warranty given to the Seller by such Third Party Supplier and will (on request) supply to the Buyer details of the terms and conditions of such warranty and copies of any relevant product information sheets, technical data sheets or product leaflets issued by such Third Party Supplier and the Buyer shall be solely responsible to the entire exclusion of the Seller for complying with the same.

7. For the purposes of Condition 1 references to Goods shall be deemed to exclude software.

8. The Buyer acknowledges that software in general is not error-free and agrees that the existence of such errors in the Software Programs shall not constitute a breach of this Contract.

9. In the event that the Buyer discovers a material error which results in the Programmed Products not performing substantially in accordance with the Functional Specification, or the Licensed Programs not performing substantially in accordance with the relevant Program Documentation and notifies the Seller of the error within 90 days from the date of the Seller making available the respective software to the Buyer (the `**warranty period"**) the Seller shall at its sole option either refund the price which the Buyer has paid to the Seller (or if such price has not been paid, relieve the Buyer of all obligations to pay the sum) in respect of the respective software or use all reasonable endeavours to correct by patch or new release (at its option) that part of the software which does not so comply provided that such non-compliance has not been caused by any modification, variation or addition to the software not performed by the Seller or caused by its incorrect use, abuse or corruption of the software by use of the software with other software or on equipment with which it is incompatible,

10. To the extent permitted by English law, the Seller disclaims all other warranties, with respect to the software which it provides pursuant to the Contract, either express or implied, including but not limited to any implied warranties of satisfactory quality or fitness for any particular purpose.

11. The Buyer is solely responsible for various scanning the software that it receives from the Seller pursuant to the Contract.

12. The Seller warrants that it will use reasonable skill and care in providing the Services to the buyer